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APPLICATION NO	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO	CONFIRMATION NO.
09/807,861	07/03/2001	Gerhard Pflueger	1586	6243

7590 10/22/2003

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EXAMINER	
NGUYEN, TRAN N	
ART UNIT	PAPER NUMBER
2834	

DATE MAILED: 10/22/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	09/807,861	PFLUEGER ET AL.
	Examiner	Art Unit
	Tran N. Nguyen	2834

-- The MAILING DATE of this communication appears on the cover sh et with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____ .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☐ Claim(s) 15-29 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☐ Claim(s) 15-29 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. **Claims 15-16** are rejected under 35 U.S.C. 102(**b**) as being fully anticipated by **Ragaly** et al (US 6013967).

Ragaly discloses a claw pole generator (figs 1-8), particularly a pole wheel half (21) is connected to a rotor shaft (20) in a manner fixed against relative rotation, and the pole wheel half (21) is also connected to the pole carrier only by a retaining means (10) in a manner fixed against relative rotation, wherein the retaining means (10) is disposed at least partly in the radially outwardly open claw pole interstices (fig 8), wherein the retaining means (34) is radially outwardly unobstructed and connected by material engagement by welding (fig 8).

Claim Rejections - 35 USC § 103

2. **Claims 15-20** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Lechner** (US 6150746) in view of ***level of ordinary skills of a worker in the art***

Lechner discloses the claimed invention, a claw pole generator (figs 1-6), particularly a pole wheel half (7) is connected to a rotor shaft (10) in a manner fixed against relative rotation, and the pole wheel half (21) is also connected to the pole carrier only by a retaining means (2) in a manner fixed against relative rotation, wherein the retaining means (10) is disposed at least partly in the radially outwardly open claw pole interstices (fig 5-6), wherein the retaining means (2) is radially outwardly unobstructed and connect to the claw poles. The retaining means (2) comprising a plurality to individual retaining elements each of which has legs (2c) extending to both sides of the first and second claw poles in radial direction and two adjacent retaining means are joined by tabs (2b) that are bend at angle relative to the rotor shaft and the tabs (2b) terminates flush with an axial outer side of the pole carrier. Lechner substantially discloses the claimed invention, except for the retaining means being connected to the claw poles by material engagement by welding, or soldering or adhesive.

Those skilled in the art would realize that it is preferably to mechanically fasten the retaining means to the claw poles in order to maintain the retaining means in place and enable the retaining means to withstand the centrifugal force during the rotation of the rotor. Furthermore, selecting either welding or soldering or adhesive as material engaging the retaining and the claw poles is a matter of obvious engineering design choice. These methods of mechanically fasten two structural components together are well known in the art.

Thus, it would have been obvious to one skilled in the art at the time the invention was made to modify the Lechner rotor by of mechanically fasten two structural components of the retaining means and the claw poles together by welding soldering or even adhesive. Doing so

would enable to maintain the retaining means in place and enable the retaining means to withstand the centrifugal force during the rotation of the rotor.

3. **Claims 15-29** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Lechner and** in view of **Kusase** (US 5483116).

Lechner substantially discloses the claimed invention, except for the retaining means configuration as well as the connecting arrangement of the pole claws and the retainer, as in claims 16-29.

Kusase, however, teaches an claw pole generator having rotor (3) with two half claw pole wheels (13, 14), each of which having a plurality of claw poles (15, 16), the claw pole rotor (3) particularly comprises retaining means (12) which including a plurality of individual retaining elements (24) with a magnet (11) being secured thereto. The retaining elements (24) comprises tabs (26, 27) which are bent at an angle relative to the rotor shaft (6); and two adjacent retaining elements are joined by the tabs in the region of the claw pole ends. In one embodiment (figs 1-5) Kusase shows the retaining means as one piece and the tabs formed integrally with the retaining elements, wherein the one-piece retaining means has a substantially cylindrical jacket like structure which has open recesses, alternating on the pole for accommodating the first claw poles and the second claw poles therein. In another embodiment (figs 6-10), Kusase discloses the retaining element having a rectangular-hollow profile to fit the space between adjacent two claw poles. Inherently, a rectangular hollow shape has two opposite legs (51) located parallel to the first and second claw poles' flanks and the legs (51) is connected by a pole end web (53) and that the rectangular hollow shape has a closed hollow profile (28) which accommodates the magnet (26) therewithin. Those skilled in the art would realize that magnet holders holding a plurality of magnets disposed in the at least partly in the claw pole interstices are well known in the art because the magnets would prevent magnetic flux leakage and enhance rotor magnetic characteristics. Kusase teaches that the retainer configuration as well as the connecting arrangement of the pole claws and the retainer would achieve low noise operation by preventing generations of high

frequency impact magnetic noise and makes it possible to relieve strains applied on the retainers which also serve as magnet holder.

Thus, it would have been obvious to one skilled in the art at the time the invention was made to modify the retainer by configuring the retainer as magnets holder and arranging the retainer securely between the pole claws in the manner as taught by Kusase. Doing so would enable the retainer to function as magnets holders, without the need of additional part and the magnets would prevent magnetic flux leakage therein, and achieve low noise operation by preventing generations of high frequency impact magnetic noise and makes it possible to relieve strains applied on the retainer.

Communication

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tran N Nguyen whose telephone number is (703) 308-1639. The examiner can normally be reached on M-F 6:00AM-2:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nestor Ramirez can be reached on (703)-308-1371. The fax phone numbers for the organization where this application or proceeding is assigned are (703)305-3431 for regular communications and (703)-395-3432 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)-308-1782.

TRAN NGUYEN
PRIMARY PATENT EXAMINER
TC-2800